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ABSTRACT

Despite the widespread use and acceptance of indicators in so many fields, this research method tends to be underutilized in the broader social policy arena. One reason may be the haziness that exists about how social indicators differ from other types of research in the social sciences. In addition policy makers may have little or no knowledge of the purposes for which social indicators are best suited, and when the use of indicators is inappropriate. This brief for policy makers and other concerned with improving child well-being was developed to raise awareness and encourage further discussion about the use of this research method. The brief details five purposes that social indicators can serve: description, monitoring, setting goals, increasing accountability, and "reflective practice"--which functions like an internal evaluation. The brief also sounds some cautionary notes about the misuse of social indicators, suggesting, for example, that it is inappropriate to use these statistical markers to determine cause and effect. (Author/HTH)

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February 2003

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The Uses (and Misuses) of Social Indicators: Implications for Public Policy

By Kristin Anderson Moore, Ph.D., and Brett V. Brown, Ph.D., with Harriet J. Scarupa, M.S. February 2003

Overview *Indicators – statistical markers – are used in many areas of life to track patterns and trends over time. For example, indicators are used in the economic realm to monitor the ups and downs of the economy, in the public health field to track patterns of disease, and by the nation's school systems to track student achievement. And while most baseball fans might not be aware of it, they're using indicators when they cite "stats" on batting averages to debate the merits of one ballplayer over another.*

Despite the widespread use and acceptance of indicators in so many fields, indicators tend to be underutilized in the broader social policy arena. Yet social indicators, as indicators in this arena are called, can be very valuable to policy makers. For example, social indicators can act as an early warning system, or "miner's canary,"[1] about a problem so that quick action can be taken to address it. Consider the way indicators showing an increase in binge drinking among American teens have alerted the public about this problem and spurred coverage of it in the media.

It may be that one reason indicators are not used as fully in the social policy arena as in some others is the haziness that exists about how social indicators differ from other types of research in the social sciences. In addition, policy makers may have little or no knowledge of the purposes for which social indicators are best suited, and when the use of indicators is inappropriate. This Research Brief *sets out to help clarify these issues. It suggests five purposes that social indicators can serve: description, monitoring, setting goals, increasing accountability, and "reflective practice"(which functions like an internal evaluation).*

The brief also sounds some cautionary notes about the misuse of social indicators. For example, it suggests that it is inappropriate to use these statistical markers to determine cause and effect. Thus, social indicators can tell you that the rate of binge drinking among American teens has gone up over the past decade but, alone, they can't tell you that a particular factor or factors caused *this increase.*

This *Research Brief* is different from most Child Trends briefs, which customarily present data and research findings related to children, youth, and families. In contrast, this brief was developed to raise awareness and encourage further discussion about a research method that can be helpful to policy makers and others concerned with improving the well-being of children and their families.

The Research Context

To get a better grasp of the appropriate use of social indicators as tools for policy makers, program developers, and opinion shapers, it may be helpful to review several of the basic types of quantitative social science research. Here we identify four major kinds of such research:

- **Experimental studies** are the only type of research that truly can account for cause and effect, and, therefore, are considered the "gold standard" for making conclusions about what causes what. In experimental studies, individuals are randomly assigned either to a treatment or program group or to a control group, and then their outcomes are compared. An example would be experimental studies on

[1]The proverbial term "miner's canary" originated in the practice of miners taking a canary with them into the mines where they worked. If there was a poisonous gas leak in the mines, the canary would fall dead, alerting the miners to the danger and allowing them to get away to safety.

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youth mentoring programs in which some adolescents are randomly assigned to have a mentor and others are not. (Quasi-experimental comparison studies are similar to experimental studies except for one crucial distinction: the comparison groups are not assigned randomly, so causal conclusions cannot be reached with certainty.)

- **Basic research studies** aim to increase our basic understanding of a particular topic, such as how divorce seems to affect children. Longitudinal, multivariate studies would fall under this category, that is, studies that follow individuals across time and examine three or more variables. In the case of children of divorce, such studies could provide some insights into how well – or how poorly – these children fare over the years and what factors might affect their adjustment.
- **Implementation research studies** serve essentially as management tools that allow people to understand whether and how well a service was delivered. For example, a study of this type could help determine whether implementing an early childhood education program actually resulted in the provision of measurable high-quality services to preschool children.
- **Indicator studies** are typically based on cross-sectional data, that is, information that is collected at one point in time, usually through periodically administered surveys. Good examples might be the *KIDS COUNT* reports[2] spearheaded by the Annie E. Casey Foundation and *The Right Start* reports,[3] a collaborative effort between the KIDS COUNT initiative and Child Trends. Drawing on multiple sources, the reports provide over-time data on key measures that describe the well-being of infants, children, or youth. For example, among *The Right Start* indicators are measures of being born to a teen mother, of low birth weight, prematurely, and to a mother who smoked.

Key Uses of Social Indicators

Social indicators are widely used because they serve a number of purposes:

- **Description: to inform citizens and policy makers about the circumstances of their society, to track trends and patterns, and to identify areas of concern as well as positive outcomes.** For example, numerous reports provide descriptive statistical information about the circumstances of America's children and families. Perhaps the best known are *America's Children: Key National Indicators of Well-Being*,[4] the flagship document of the Federal Interagency Forum on Child and Family Statistics, and the annual *Trends in the Well-Being of America's Children and Youth*,[5] which is disseminated by the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. More recently, online data resources such as the *Child Trends DataBank*[6] have become available. Such indicator reports and resources provide a handy way for the public or policy makers to get a grasp of trends that appear promising (e.g., a decline in child and youth deaths) and those that appear troubling (e.g., an increase in childhood obesity). Indicator reports also often provide information on subgroup differences (e.g., by gender, race/ethnicity, and poverty status) within the larger population, such as the recent statistics showing that Hispanics have higher teen birth rates than whites or blacks. Thus, using social indicators for the purpose of description can tell you much more than what America looks like. Social indicators also can help to describe the variability within the population and the differences across social groups.
- **Monitoring: to track outcomes that may or may not require policy intervention of some kind.** Most people are familiar with using indicators for the purpose of monitoring in the public health field. For example, the U.S. Centers for Disease Control and Prevention has set up a variety of disease surveillance systems to identify emerging threats to the health of the nation, as well as threats to specific communities and to specific populations within communities. We have seen this approach in

[2] http://www.aecf.org/kidscount/
[3] http://www.aecf.org/kidscount/rightstart2003/
[4] http://www.childstats.gov/
[5] http://aspe.hhs.gov/hsp/00trends/
[6] http://www.childtrendsdatabank.org

operation in the warnings issued about the presence of the West Nile virus in certain localities. Similarly, school systems often use indicators to monitor how well children are doing on standardized tests, often targeting those schools with low scores for special interventions. An example from the social policy arena would be using social indicators to track measures of child outcomes through the years of welfare reform in order to monitor the well-being of children, particularly low-income children, during a time of major social change.

- **Setting goals: to establish quantifiable thresholds to be met within a specific time period.** Here, again, examples from the public health and education fields come readily to mind. The *Healthy People 2010* initiative,[7] developed by the U.S. Department of Health and Human Services, identifies 467 specific, measurable goals aimed at improving the health of all Americans by the year 2010. And, under the provisions of the year-old *No Child Left Behind Act,*[8] states create their own standards for what a child should know and learn for all grades; and each state, school district, and school is expected to show yearly gains in meeting those standards. Using indicators in such ways allows a society to express the goals it deems important and the values it cherishes (in our examples, a healthy citizenry and well-educated children). This role of social indicators in setting goals that express values underscores the importance of developing social indicators that track outcomes that are positive (e.g., teen volunteering) as well as those that are negative (e.g., teen homicide.)
- **Increasing accountability: to achieve positive or improved outcomes.** Business managers are held accountable for the profitability of their enterprises, coaches for the performance of their teams, and politicians for meeting the needs of their constituents. Increasingly, government and private funders are using social indicators to hold states, communities, agencies, and individual programs accountable for improving outcomes for children and youth. The word *outcomes* is noteworthy. It signals a change from using input data to using outcome data to measure accountability. (Input data might be the number of hours a teacher teaches or the number of hours of psychotherapy a patient receives. However, outcome data would show whether the teacher's students showed improvements in their grades or whether the patient who saw a psychotherapist experienced improvements in his or her mental health.) Using social indicators to increase accountability is sometimes connected to rewards or sanctions. For example, at the federal level, under welfare reform, states that reduced births outside of marriage the most without increasing abortions have been rewarded with substantial bonus payments. The risk, of course, is that many factors can determine trends and only some of them may be under the control of the person or organization being held accountable. Thus, caution is necessary when indicators are used for the purpose of accountability.
- **Reflective practice: to inform practices of communities and individual programs on an ongoing basis.** Sometimes communities develop formal logic models – graphic planning tools designed to show how particular program activities are related to expected outcomes. They use these models to monitor whether these program activities are accomplishing their objectives. For example, in the planning stages for evaluating South Carolina's school readiness initiative, *First Steps to School Readiness,* Child Trends researchers developed a logic model[9] to help people understand the links between making an investment in a particular school readiness program and what that might be expected to accomplish over time. Such models use social indicators to monitor progress in all such links in the model.

One of the great advantages of social indicators (over other types of research), regardless of the particular purpose for which they are used, is that they can become available *quickly* so that they can be used *quickly* to inform and improve public policy. For example, recent social indicators showing

[7]http://www.health.gov/healthypeople/

[8]http://www.ncld.gov/next/overview/index.html

[9]The logic model is included in the evalutation report http://www.scfirststeps.org/public/index.htm.

a decline in the rate of teen births outside of marriage might be seen as a harbinger of greater family stability, more two-parent families, and better outcomes for children a decade later. Policy makers concerned with promoting and encouraging marriage need to have this type of information, and the sooner, the better.

The Proper Use of Social Indicators

As seen above, social indicators can be helpful tools for policy makers, practitioners, and the public, but using them correctly requires attention to a number of issues:

- **Social indicators need to be measured for the appropriate population.** For example, if a policy focuses on services for low-income children, then the outcomes should be measured for low-income children – not middle-class or all children.
- **Social indicators need to be measured at the appropriate geographic level.** For example, while the 1996 welfare reform resulted from the enactment of a federal law, welfare reform plays out at the state and local level. Looking just at trends on the national level may obscure how a policy is affecting individuals in their own states and home communities.
- **Social indicators need to be well-conceptualized.** That is, social indicators need to accurately reflect the concept that they are intended to capture. Again, welfare reform provides a useful context. Of course, welfare has always been a program about children; for many years, it was called Aid to Families with Dependent *Children*. Proper conceptualization suggests recognizing that welfare reform is not just about outcomes for adults, such as work; or for families, such as poverty, but for children as well; indicator measures need to reflect this conceptualization.

The Misuse of Social Indicators

Social indicators can be misused – either intentionally (for political advantage, for example) or unintentionally (due to inadequate training and technical assistance for practitioners and policy makers who would use social indicators). Inappropriate uses of social indicators include employing them:

- **To claim credit (or to cast blame) for societal trends.** Consider the issue of the decline in the teen birth rate over the past decade. Some advocates of abstinence for teens claim credit for the decline based on trends in sexual experience. At the same time, some advocates of contraceptives for teens attribute the decline to improvements in contraceptive use. But drawing either conclusion from indicator data alone can be misleading because trends in indicators cannot resolve issues of causality. Indeed, the causes of social change are generally very complex and it is difficult to credit just one or even two factors as causal.
- **To claim credit for program success.** For example, supporters of some anti-drug programs might cite the number of students who participated in these programs and the percent of students who had used drugs as markers of the programs' success. But such indicators cannot resolve whether the participants actually were less likely to use drugs because of the program than they would have been if they hadn't been enrolled in the program. For that, experimental evidence is needed.
- **To evaluate the performance of individuals or programs, without considering the larger context.** For example, if the numbers show that teen drinking in a community goes up, this shouldn't necessarily be taken to mean that it is time to think about firing all the school health educators. There may be other forces at work. Such misuse of indicators for purposes of accountability is always a concern.

Generally speaking, social indicators make poor tools for formal, scientific evaluations of programs, policies, and persons. Traditionally, the role of social indicators in evaluations has been rather limited, functioning as "miners' canaries" to identify policies or programs that may be particularly promising (or unpromising) and deserving of formal evaluation using more rigorous techniques. At the same time, social indicators can often complement information derived from other types of research, together providing a stronger composite picture of the effects of a program or policy. We have seen this, for instance, in some of the

research on how welfare reform programs appear to be affecting the well-being of children. Both the indicator data and experimental studies suggest that *for the most part*, welfare reform has neither harmed nor helped children to the extent anticipated by advocates.

Conclusions

This *Research Brief* makes the case that social indicators, *when properly used*, can be valuable tools for policy makers, practitioners, the media, and the general public. These statistical markers can be used to describe the circumstances of our society, to monitor how well we are doing, to set goals that reflect societal values, to increase accountability for policies and programs, and to inform practices in a given community or program. Also, whether at the state or the national level, social indicators are especially well-suited to serve as "miners' canaries," alerting society about trends, whether positive or negative.

Moreover, particularly in an era of devolution, when resources and responsibilities are being moved to the states, social indicators at the state level can be useful to state-level policy makers when used for these purposes.

Despite all this, when compared with the business world and the public health field, indicators are used far less often in the broader social policy arena, where they are potentially just as helpful. Greater use of social indicators to expand our understanding of child well-being is clearly a case in point.

Any discussion of the use of social indicators also needs to acknowledge their current limitations. For example, in some areas, we may have good measures, but we may not have good data. That seems to be the case in tracking the well-being of children in the child welfare population. The most basic information about these children (e.g., how many have asthma, how many repeated a grade in school) is often not available. In other areas, we may have data, but we lack good measures or have measures that are inadequate. Consider "religiosity," that is, religious belief and practice. Data from national surveys can tell us about teenagers' church attendance, but church attendance may be an imperfect indicator of religious belief and practice. We also lack adequate measures on such important concepts as parent-child communication and adolescent mental and emotional health.

Another concern, as mentioned earlier, is the need to develop and track measures of positive development – the kind of characteristics that can help individuals do well in life, such as close and warm relationships with family and friends, civic involvement, ethical behavior, and a love of learning. Most of the social indicators that we track and analyze about children and teens are negative, such as rates of infant mortality, teen pregnancy, and substance abuse. While tracking negative outcomes is essential, positive measures can enable policy makers, practitioners, the media, and the general public to focus not only on preventing what's wrong but also on supporting and nurturing what's right. Developing such measures may well be the next frontier in the use of social indicators.

Meanwhile, those who are seeking to expand the rigorous and appropriate use of social indicators often explain their concern by using the simple adage: "What gets measured, gets done."

Some of the material in this brief is based on a presentation made by Kristin Anderson Moore, Child Trends President and Senior Scholar, to an Ad Hoc Meeting on Measures of Child Well-Being that was held at the Brookings Institution in Washington, DC, September 20, 2002. The brief also draws on ideas presented by Brett V. Brown and Kristin Anderson Moore in "Child and youth well-being: The social indicators field," a chapter in *Handbook of Applied Developmental Science*, published in 2002 by Sage Publications, and by Brett V. Brown and Thomas Corbett in "Social indicators and public policy in the age of devolution," which will be included in *Trends in the well-being of children and youth*, published by Child Welfare League of America Press (now in press).

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